NON-PUBLIC?: N
ACCESSION #: 9508040061
LICENSEE EVENT REPORT (LER)

FACILITY NAME: H. B. ROBINSON STEAM ELECTRIC PLANT, PAGE: 1 OF 3
UNIT NO. 2

DOCKET NUMBER: 05000261

TITLE: REACTOR TRIP DUE TO MAIN STEAM ISOLATION VALVE CLOSURE
EVENT DATE: 06/30/95 LER #: 95-004-00 REPORT DATE: 07/31/95

OTHER FACILITIES INVOLVED: DOCKET NO: 05000

OPERATING MODE: N POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR SECTION:
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:
NAME: A. L. Garrou: Acting Manager - TELEPHONE: (803) 383-1544
Licensing/Regulatory Programs

COMPONENT FAILURE DESCRIPTION:
CAUSE: X SYSTEM: SB COMPONENT: FUB MANUFACTURER:
REPORTABLE NPRDS: Y

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On June 30, 1995, H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2 was operating at 100% power. At 1426 hours, a reactor trip occurred as the result of an inadvertent closure of "B" Main Steam Isolation Valve (MSIV) MS-V1-3B. Upon closure of MS-V1-3B, the Reactor Protection System (RPS) reactor trip signal was received from Low - Low "B" Steam Generator level. Following the reactor trip, Operations personnel placed the plant in hot shutdown condition in accordance with plant procedures.

This event was caused by component failure. Subsequent investigation found that the MSIV closure was caused by a loose fuse block fuse clip for the fuse that supplies control power to the MSIVs actuator "open" air supply solenoid valve. The loss of power occurred while Operations personnel were reinstalling a fuse on a nearby circuit of the same fuse block on the same 125 VDC Auxiliary Panel for an unrelated piece of

equipment. Following relocation of the two affected circuits that were identified and post maintenance testing, the plant was returned to 100 percent power.

This event is reported pursuant to 10 CFR 50.73(a)(2)(iv) as an RPS actuation.

END OF ABSTRACT

I. DESCRIPTION OF EVENT

On June 30, 1995, H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2 was operating at 100% power. Operations personnel were realigning a Local Clearance on the 125 VDC Auxiliary Panel (EIIS Code: EJ) GC, Circuit 3, Chemical and Volume Control System (CVCS) (EIIS Code: CB) valve CVC-204B (EIIS Code: ISV). When the operator installed the CVC-204 control power fuses (EIIS Code: FU into the fuse block Circuit 3 fuse holder (EIIS Code: FUB), sufficient pressure was simultaneously exerted on a nearby Circuit 1 fuse holder for "B" Main Steam Isolation Valve (MSIV) (EIIS Code: ISV) MS-V1-3B actuator "open" air solenoid valve (EIIS Code: PSV). The exerted pressure caused a momentary break in electrical contact of the Circuit 1 fuse. As a result, MS-V1-3B "open" air solenoid valve repositioned allowing control air to bleed off the MSIVs actuator. MS-V1-31B began to close due to the force from the closing spring and was driven closed once it entered the steam flow stream. Upon closure of the MSIV, the resulting Low - Low "B" Steam Generator level initiated a Reactor Protection System (RPS) (EIIS Code: JE) reactor trip signal. Following the reactor trip, Operations personnel placed the plant in hot shutdown condition in accordance with plant procedures.

The NRC was notified of this event at 1511 hours via the Emergency Notification System in accordance with 10 CFR 50.72(b)(2)(ii).

II. CAUSE OF EVENT

This event was caused by a component failure. Subsequent investigation found that the MS-V1-3B inadvertent closure was caused by a fuse block fuse clip that supplies control power to the MSIV's "open" air supply solenoid valve and that had become loose during prior installation/removal for normal maintenance activities. The loss of control power occurred when an operator was realigning a Local Clearance on a nearby circuit of the same fuse block in the

125 VDC Auxiliary Panel GC for an unrelated piece of equipment. As part of the root cause investigation, a second loose fuse clip was found. This fuse clip was for the "C" MSIV "open" air supply solenoid valve. Following relocation of the two affected circuits that were identified and post maintenance testing, the plant was returned to 100 percent power.

III. ANALYSIS OF EVENT

The MSIVs serve to limit an excessive Reactor Coolant System cooldown rate and the resulting reactivity insertion, as well as the release of radioactive material in the event of a steam generator tube rupture. The Updated Final Safety Analysis Report Chapter 15 safety analysis for an inadvertent MSIV closure states that the consequences of this event are bounded by the results of the safety analysis for the loss of external electrical load event. All protective systems operated as designed.

This event is reported pursuant to 10 CFR 50.73(a)(2)(iv) as an RPS actuation.

IV. CORRECTIVE ACTIONS

A walkdown of the other circuits on the 125 VDC Auxiliary Panel was conducted. One additional circuit (i.e., 125 VDC Auxiliary Panel GC, Circuit 2, MSIV MS-V1 3C) was identified that also appeared to have a loose fuse clip.

The power supplies for Auxiliary Panel GC, Circuits 1 and 2 were relocated, and testing was performed to verify operability of the affected MSIVs.

V. ADDITIONAL INFORMATION

A. Failed Component Information

Fuse Block (EIIS Code: FUB)

B. Previous Similar Events

None

10 CFR 50.73

CP&L

Carolina Power & Light Company
Robinson Nuclear Plant
3581 West Entrance Road
Hartsville SC 29550

Robinson File No.: 13510C
Serial: RNP-RA/95-0145

JUL 31 1995

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

DOCKET NO. 50-261/LICENSE NO. DPR-23
LICENSEE EVENT REPORT NO. 95-004-00

Gentlemen:

The enclosed Licensee Event Report (LER), is submitted in accordance with 10 CFR 50.73. This report is required to be submitted to the NRC by July 31, 1995.

Very truly yours,

Dale E. Young
Plant General Manager

DTG:dtg
Enclosure
c: Mr. S. D. Ebneter, Regional Administrator, USNRC, Region II
Ms. B. L. Mozafari, USNRC Project Manager, HBRSEP
Mr. W. T. Orders, USNRC Senior Resident Inspector, HBRSEP

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